AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

- 1.-12. (canceled).
- 13. (currently amended) An isolated or purified antibody that specifically binds an amino acid sequence epitope consisting of residues 1-12 of SEQ ID NO:18.
- 14. (previously presented) The antibody according to claim 13, wherein said antibody is a monoclonal antibody.
- 15. (previously presented) The antibody according to claim 14, wherein said antibody is a purified IgG fraction.
- 16. (previously presented) The antibody according to claim 13, wherein said antibody is a polyclonal antibody.
- 17. (currently amended) The antibody according to claim 13, wherein said antibody specifically binds to a polypeptide comprising said <u>amino acid sequenceepitope</u>.
- 18. (previously presented) The antibody according to claim 17, wherein said antibody is a monoclonal antibody.
- 19. (previously presented) The antibody according to claim 18, wherein said antibody is a purified IgG fraction.
- 20. (previously presented) The antibody according to claim 17, wherein said antibody is a polyclonal antibody.

- 21. (previously presented) The antibody according to claim 13, wherein said antibody binds to human prostacyclin synthase and does not bind to bovine prostacyclin synthase.
- 22. (currently amended) An isolated or purified antibody that specifically binds an amino acid sequence epitope consisting of residues 1-12 of SEQ ID NO:18, said antibody produced using an immunogen comprising a polypeptide, wherein said polypeptide comprises residues 1-12 of SEQ ID NO:18.
- 23. (previously presented) The antibody of claim 22, wherein said polypeptide consists of residues 1-12 of SEQ ID NO:18.
- 24. (previously presented) The antibody of claim 22, wherein said immunogen further comprises complete Freund's adjuvant or keyhole limpet hemocyanin.
- 25. (currently amended) A method for producing an antibody that specifically binds an amino acid sequence epitope consisting of residues 1-12 of SEQ ID NO:18, comprising;
- (a) administering an immunogen comprising a polypeptide to an animal, wherein said polypeptide comprises residues 1-12 of SEQ ID NO:18, and
- (b) isolating an antibody from said animal of (a) that specifically binds an <u>amino acid</u> sequence epitope-consisting of residues 1-12 of SEQ ID NO:18.
- 26. (previously presented) The method according to claim 25, wherein said polypeptide consists of residues 1-12 of SEQ ID NO:18.
- 27. (previously presented) The method according to claim 25, wherein said immunogen further comprises complete Freund's adjuvant or keyhole limpet hemocyanin.

- 28. (previously presented) The method according to claim 25, wherein said antibody has the following properties (A) and (B):
 - (A) specifically binds human prostacyclin synthase, and
 - (B) does not bind bovine prostacyclin synthase.
- 29. (previously presented) The method according to claim 25, wherein said antibody specifically binds human prostacyclin synthase alone.